

Market Guide for Telecom Expense Management Services, 2017

Published: 11 May 2017 **ID:** G00326384

Analyst(s): Lisa Uden-Farboud, Katja Ruud

Optimizing costs and managing efficiencies within dispersed telecom estates continues to challenge enterprises. IT infrastructure and operations leaders should evaluate TEM vendor offerings for a cost-effective and efficient solution when planning, sourcing and managing communications services.

Key Findings

- Gartner has seen a 45.1% rise in end-user enterprise inquiries associated with telecom expense management (TEM) in 2016. Many organizations are looking to source a TEM vendor to help with cost optimization and efficiency of their telecom estates — fixed and mobile. Enterprises typically benefit from a third party to navigate the telecommunications market when their telecom estates are complex or don't have resources to effectively manage them internally.
- Many TEM vendors are extending their scope from fixed and mobile services deeper into managed mobility and other IT expenses, such as usage and inventory management for unified communications and collaboration, cloud application licensing and emergence, machine-to-machine (M2M)/Internet of Things (IoT). For the most complex multinational corporation (MNC) or enterprise needs, there are few TEM providers with true global reach.

Recommendations

To optimize communications service management, infrastructure and operations (I&O) leaders should:

- Assess TEM vendors on their ability to perform ongoing cost and inventory optimization by their ability to drive ongoing efficiencies at scale and enhanced analytics for business intelligence and scenario planning for strategic growth initiatives.
- Ask vendors to supply recent references of the same size, geographic spread and services mix for both traditional, and if required, additional services such as usage and inventory of cloud application licensing (unified communications as a service [UCaaS], infrastructure as a service [IaaS], platform as a service [PaaS], among others), or mobile IoT endpoints and managed

mobility services (MMS) or mobile device management (MDM) capabilities and level of partnering (for the latter).

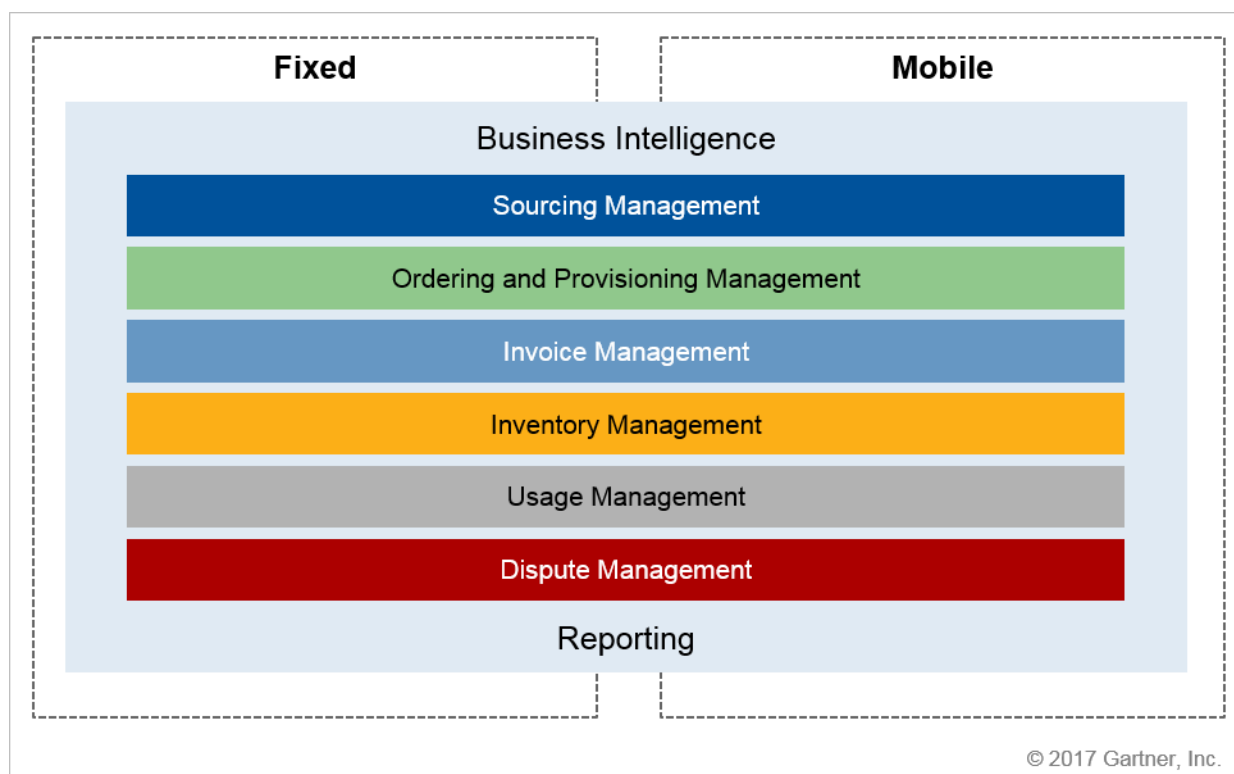
- Choose vendors that fit your geographic scale; the right size according to expected annualized spend or device count. Some vendors might need to partner outside of their core region. Select the most appropriate engagement model as prices vary widely, especially if your reach is global or complex, whether a fully managed TEM engagement or SaaS with basic management.

Market Definition

This document was revised on 23 May 2017. The document you are viewing is the corrected version. For more information, see the [Corrections](#) page on Gartner.com.

Telecom expense management (TEM) services provide enterprises — primarily their IT, procurement and finance departments — with the ability to order, provision and support large-scale corporate communications services, for both fixed and mobile. Gartner's coverage of TEM focuses on software-as-a-service (SaaS)-based applications and associated professional services, see Figure 1 for traditional fixed and mobile TEM services.

Figure 1. Traditional TEM Services



TEM = telecom expense management

Source: Gartner (May 2017)

Many TEM providers are evolving their offerings to include MMS and other expense management/usage management. For example, emerging IoT, unified communications (UC) and licensing management for hosted applications (such as Skype for Business and Salesforce), as well as cloud offerings (such as IaaS and PaaS).

For detailed descriptions of these component services, see the Definitions section.

The continued growth and evolution of enterprise telecom services (driven by the use of video, cloud services and mobility), prompts many companies to evaluate TEM services for ongoing cost optimization and efficiencies, especially if they lack the internal resources to effectively optimize or have limited governance on telecom and IT procurement over a complex enterprise footprint. Many mature enterprises could also do this internally, yet find it more cost-effective to outsource. As communications and IT services evolve, enterprises must make a thorough evaluation of their telecom estates and evolution.

Market Direction

TEM vendors continue to evolve their offerings to meet requirements for managing the cost of communications services. Enterprises can choose from several options ranging from basic TEM SaaS services to fully managed TEM or TEM business process outsourcing (BPO) engagements, as well as bundled or a la carte services, depending on whether enterprises want to insource, outsource or pick-and-choose services.

Features such as mobility extending into MMS include enterprise mobility management (EMM)/MDM integration and elementary M2M offerings that are becoming available to meet increasing enterprise interest. Also the ability to manage inventory, expenses and licenses associated with other IT services and platforms like unified communications and cloud-based offerings (such as IaaS, PaaS usage management) are an evolving option for consideration with TEM vendor capabilities.

For enterprises with international requirements, partnering either from a technical perspective or to boost reach is a relatively common practice for TEM providers. Enterprises now have a wide competitive landscape to choose. In addition to TEM providers such as those mentioned in Table 1, system integrators (SIs), outsourcers/business management firms such as Accenture, Advocate Telecom, IBM and communications service providers such as BT, Orange and Telefónica will provide TEM services for ongoing audit and management platform capabilities.

In addition, enhanced dashboards, user interfaces and platform analytical capabilities enable easy visualization of savings and inventory. These enable event-based spending actions, change management and scenario-based planning for future contract negotiations based on usage patterns and network service provider performance.

Market Analysis

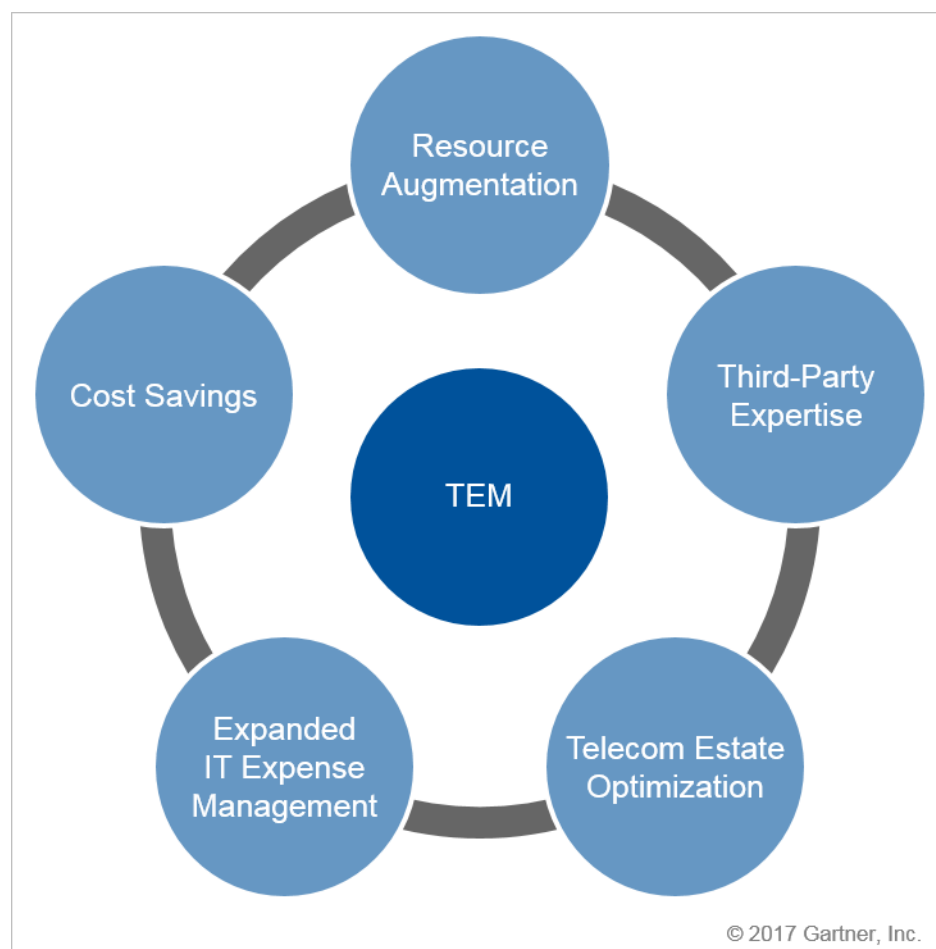
The telecom expense management market is mature but highly fragmented; it continues to generate interest from large domestic, regional and multinational enterprises. Gartner noted a 45.1% increase in end-user inquiries in 2016 versus 2015. In particular, 72% from large enterprises with revenues of \$1 billion or more (also 50% from large MNCs with revenues of more than \$3 billion) and large as well as government and public service entities (representing 7%) with typically very complex national requirements.

Many enterprises report that they are struggling to rein in their telecom service spend, which globally represents 15% (over \$515 billion year-end [YE] 2016) of global IT spend (\$3,375 billion). Going forward, enterprises will want more visibility and management of their investments on cloud-based services, such as UC, IaaS and PaaS, because the rise in such services is breaking telecom budgets and becoming increasingly difficult to contain.

While many businesses recognize the need to govern telecom spending more closely, complicating their ability to do so may be caused by a lack of a central expense management process and a fragmented purchasing authority regime spread among regional offices. Politics internally at regional offices, and being without one central process, may also further complicate matters. To meet requirements, TEM vendors are adjusting their offerings for basic TEM services with simplified pricing structures through to fully managed TEM or a la carte modules.

Enterprise clients in the U.S. and Europe account for the bulk of telecom spend, over 90% of which, are under management by TEM companies. However, enterprises in Asia/Pacific (APAC) and Latin America are also showing in-country-specific and regional demands, and there are some emerging requirements from enterprises in the Middle East and Africa with specific focuses on managing not just domestic/regional cost, but also elements of international spend. Differences in cultural and IT/telecom procurement structures may prove to be hurdles in sourcing a TEM vendor. Enterprises confronting such challenges should highlight not just cost optimization, but also the ongoing value of TEM, emphasizing the transition from tactical day-to-day resource savings to more strategic initiatives.

Figure 2. The Ongoing Value of TEM



TEM = telecom expense management

Source: Gartner (May 2017)

Other factors occurring in the TEM market will also impact vendor selection.

- **Price/Contracts** — Prices have started to dwindle with competitive bid situations undercutting market pricing by as much as 30% on the mobile side in a few instances. Offerings have evolved to encompass more features such as MMS, UC and other IT asset modules from basic self-managed platforms. Fully managed TEM or BPO style engagement includes additional options such as sourcing, procurement, optimization, or wireline ordering. Companies can also choose a la carte by selecting the options of TEM managed services to meet their exact needs. Add-on or combined features can include MMS, MDM integration and IT service support management (ITSSM) platforms such as ServiceNow or other IT management packages. Accounts payable (AP) and HR integrations are typically via big ERP platforms such as SAP, but in cases where necessary, vendors can offer more customizable AP/HR integrations. The most

important factor is to right size, obtain the services required and work in the necessary manner expected across the telecom estate for efficiency.

- **Market Consolidation** — Increasingly, private equity companies have been involved in acquisitions in this space to enable TEM companies to expand, combining companies from a technical and geographic perspective. While consolidation is sometimes thought to reduce buyer choice and increase pricing, this has not yet been observed through to early 2017. Vendors remain competitive. Examples of consolidations include Asentinel's acquisition of eMOBUS (MMS provider) in 2015 and Anatole (European-based TEM provider) in May 2016; Cass Information Systems' acquisition of its long standing European TEM partner Efftel in 1Q17; and Tangoe's acquisitions — with the latest being Vodafone's TEM business in April 2016. On 28 April 2017, Marlin Equity Partners also entered into an agreement to acquire outstanding shares in Tangoe. At closing, Marlin intends to merge Tangoe with Asentinel to operate a new company under the Tangoe brand. Consolidation will continue over the next two years.
- **Service-Level Agreements (SLAs)** — TEM providers are now encountering more formal RFP or vendor selection processes and should provide sets of comprehensive SLAs associated with the important and main functions of the TEM engagement over time. Best-practice examples around TEM SLAs can be found in "Service-Level Agreements in Telecom Expense Management Contracts Are Key to Vendor Performance."
- **Buying cycles lengthened** during the second half of 2016. Part of this is due to the careful selection of criteria and determining whether to insource or fully manage from a third party.
- **The average contract remains** at around 36 months with a 12-month break/renewal clause. Some vendors provide month-by-month contracts, but this is atypical in the market.

Representative Vendors

The vendors listed in this Market Guide do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings.

Readers should consider all applicable candidate vendors that interest them. The vendors here are those most frequently asked about in Gartner end user inquiry, typically serving the large, regional and MNC enterprise base.

The global TEM market is highly fragmented with some 200-plus vendors active, along with lots of consolidation and partnering for additional scope of services and geographic scale. Enterprises need to find the right fit for their reach, resource requirements and level of engagement in each country or region. Check the capabilities of the TEM provider in international regions — can they address the level of service expected or only part of this? Assess the level of internal governance you have on your communications estate by region and country again, and then pair with the level of management from the TEM provider — whether a self-managed SaaS TEM service or fully managed TEM BPO-style engagement. Enterprises must have a good evaluation of their telecom estates and understanding of their future plans. Vendors provide capabilities to assist in managing sourcing, ordering and provisioning, invoice, inventory, usage, dispute management as well as business reporting and intelligence/analytical capabilities for ongoing efficiencies for both fixed and

mobile telecom environments. They are expanding into other IT areas such as cloud licensing, UC and managed mobility services.

Table 1. TEM Providers

Vendor	Headquarters	Ownership	Main Coverage	Website
Asentinel	Memphis, Tennessee, U.S.	Marlin Equity Partners	North America, Europe	www.asentinel.com
Calero	Rochester, New York, U.S.	Clearlake Capital Group	North America, reaching to 40+ countries globally	www.calero.com
Cass Information Systems	St. Louis, Missouri, U.S.	Public traded (Nasdaq: CASS)	North America, Europe, Asia/Pacific, Latin America	www.casstelecom.com
Cimpl	Montreal, Quebec, Canada	Privately Owned	North America	www.cimpl.com
Comview	New York, U.S.	Privately Owned	North America	www.comviewcorp.com
Dimension Data	Johannesburg, South Africa, and Hampshire, U.K.	Wholly-owned subsidiary of NTT Group	Global	www.dimensiondata.com
MDSL	Tunbridge Wells, U.K.	Privately Owned	Global	www.mdsl.com
Mobile Solutions	Centennial, Colorado, U.S.	Part private, part Clovis Point Capital	North America	http://mobilesolutions.net
Network Control	Waverly, Iowa, U.S.	Privately Owned	North America	http://network-control.com
Saaswedo	Paris, France	Part private, Ardian (minority)	Europe and North America	www.saaswedo.com
Tangoe	Orange, Connecticut, U.S.	Investors	Global	www.tangoe.com
Telesoft	Phoenix, Arizona, U.S.	Sumeru Equity Partners	North America	www.telesoft.com
TNX	Santiago, Chile	Privately owned	Latin America, Iberia	http://tnxcorp.com
VoicePlus	Sydney, Australia	Privately owned	Australia and Asia/Pacific	www.voiceplus.com.au

Vendor	Headquarters	Ownership	Main Coverage	Website
WidePoint	McLean, Virginia, U.S.	Public traded (NYSE MKT: WYY)	North America	www.widepoint.com
Nasdaq = National Association of Securities Dealers Automated Quotations; NYSE = New York Stock Exchange; TEM = telecom expense management				

Source: Gartner (May 2017)

Asentinel

Asentinel's primary operations are in the United States and Europe. More than half of the company's 250 employees are located outside of the United States, while the client base includes more than 300 European-based MNC clients (active in most regions) and 600 U.S.-based clients (most with global requirements). Asentinel serves enterprises with an annual spend that ranges from \$1 million to \$500 million, or possesses over 1,000 mobile devices.

Asentinel's TEM offering is available as self-managed SaaS, fully managed SaaS, or on-premises with optional services across each offering including BPO and bill payment. The platform and services support life cycle communications management functions for fixed, mobile, physical assets and virtual assets.

Through its acquisition of eMOBUS in 2015, Asentinel expanded its North American capabilities for real-time mobility management. In 2016, the company acquired European-based Anatole to widen its global TEM capabilities. Asentinel's offering also includes a network of strategic North American and international partners such as Orange Business Services, BT Global Services, and Computacenter for complex engagements. Global support is provided through facilities in the U.S. and Europe.

Asentinel's platform is a preloaded solution, supporting dozens of languages, hundreds of vendors (IT, cloud and communications service providers and IT asset vendors) along with thousands of assets globally. The platform uses rules and limits to automate savings discovery, to avoid service disconnects and disruptions, and to provide enterprises with the control expected from a TEM solution. On 28 April 2017, Marlin Equity Partners (who owns Asentinel) announced an agreement to acquire Tangoe. Once completed, Tangoe will be combined with Asentinel and will operate under the Tangoe brand. The Asentinel platform is a key component of the company's future and will be fully supported for the duration of all contracts.

Calero

Calero is a provider of communications and cloud life cycle management, supporting more than 3,000 North American based enterprises, government agencies, universities and North American based MNCs across all verticals, reaching to more than 40 countries globally. Calero serves customers from \$3 million to \$500 million per year of annualized communications spend and/or 1,000 up to hundreds of thousands of mobile devices. Calero has 350 employees across three main U.S. locations and uses partners to extend its reach if required.

TEM solutions range from SaaS to fully managed TEM BPO engagements with service programs encompassing all elements of managed mobility services, expense management and usage management within a single unified platform. Calero also offers optional services around benchmarking, sourcing and wireline procurement from its facilities in North America. Calero uses Lean Six Sigma process improvement and business management approaches as a focus to continually improve efficiency and client value-add in all services and client processes.

Calero continues to enhance its platform offerings beyond traditional TEM, leveraging a full Communications Lifecycle Management (CLM) suite to include IoT device management, cloud

services/infrastructure and usage-based services (such as unified communications). Calero's platform can integrate with enterprises' various internal and third-party IT service management (ITSM), AP, human resources information system (HRIS), EMM/MDM, UC, among other systems for end-to-end process management. The platform's integration capabilities include electronic data interchange (EDI) processing, web bots, image processing, file import/export with encryption support, bidirection email integration; and RESTful and Simple Object Access Protocol (SOAP) web service APIs.

Calero's integrated business intelligence platform "Calero InSight Analytics," supports the analysis of expense, inventory, usage, ordering and financial shared services management processes. It also provides proprietary, guided, multidimensional visualizations and scenario planning experience for end users and executives to maintain visibility and control over expanding IT, cloud and communications usage and costs.

Cass Information Systems

Cass Information Systems (Cass) is a federally regulated bank holding company that has provided expense management services for over 60 years. Its TEM offering provides a broad range of expense management services from fixed and mobile (with a patented bring your own device [BYOD] management service offering) extending into other IT management areas such as cloud, conferencing, print services and SaaS licensing. It also offers an emerging IoT/M2M solution, focused on IoT inventory, provisioning, invoice processing, audit, disputes and payments.

Cass has more than 800,000 corporate owned mobile devices and 300,000 individually owned devices under management and typically serves large enterprises and MNCs with over 1,000 mobile devices (smartphones, tablets, aircards, personal hot spots) or fixed spend from \$4 million to more than \$200 million annually.

Cass offers services in North America, Latin America, Europe and Asia/Pacific, either direct or via partners. It has offices in Amsterdam, Brazil and Singapore, and a processing facility in Ireland. It recently acquired long-term strategic partner Eftel, a U.K.-based TEM service company, adding additional service delivery team members in the U.K., France, Spain and Germany.

Cass Information Systems has more than 1,100 full time resources of which 160 are customer-facing telecom subject matter experts (SMEs), with an additional 450 head count within its shared service division that provides foundational invoice processing and payment services. Cass leverages REST-based APIs and batch file integration methods to integrate with leading IT service management (ITSM) solutions (including ServiceNow), HR, general ledger (GL) EMM (including Airwatch and MobileIron) and single sign-on systems. It has a bidirectional partnership with system integrators CompuCom, Acuative and Arrow Electronics.

Cass has over \$45 billion of spend under management, processing over 230,000 invoices and \$140 million in payments on a daily basis. It makes payments in local currency in over 90 countries globally.

Cimpl

Cimpl, based in Montreal, Quebec, Canada is the rebranded name for Etelesolv, as the company moves beyond managing traditional fixed/mobile of a pure TEM player to manage the enterprise's digital footprint. Cimpl offers MDM integration and IT spend management to include tablets and UC licensing. With increased international distribution and expanded partnerships in 2016, Cimpl has launched a scalable multitenant platform that enables customers to manage annual technology spend ranging from \$1 million to over \$100 million. It now has over 100 employees, manages over \$3 billion in IT and telecom spend, and 7.5 million assets and services in more than 170 different categories. The company offers its standard services as a self-managed portal for customers, a premium, fully managed service for enterprises looking to outsource all management of their fixed and mobile expenses, and a mobility managed service, typically serving medium to large companies and North American regional enterprises.

The company has developed a range of features to move beyond TEM, including new business automation processes; policy enforcement, order fulfilment and IT cost management. An integrated portal interface provides visibility for both telecom asset inventory and usage, as well as additional types of IT elements, such as unified communications and collaboration (UCC) and software subscriptions, network hardware, PCs and others.

Cimpl is increasing its focus on cloud-based environments and applications, to track costs and usage of Skype for Business, Salesforce, Concur, Cisco WebEx, Dropbox and other services. With multiple releases throughout the year, the platform provides cost allocation of these assets/elements by user-defined categories, including cost centers and business units. Complex information is connected and reorganized, allowing users to clarify their telecom and IT expenses, and link services to assets.

Cimpl continues to invest in third-party integrations with Microsoft Azure, BMC Remedy, and ServiceNow, among others. The platform provides ROI performance calculations derived from automated processes to be clearly visible on an ongoing basis, and a self-validation program for employees to confirm that their assigned technology from their bill of IT is accounted for and correct. Cimpl's portal capabilities have expanded with a comprehensive monthly reporting function for decision-makers and a provider portal, which is designed to allow providers to fulfill client service requests directly through role-based access control (RBAC) to the portal.

Comview

New York-based Comview offers a fully integrated managed solution. This includes a modular, cloud-based platform for full TEM and wireless management, call accounting and IT asset management. It provides both fixed and mobile management covering the full TEM life cycle. Comview has around 50 employees supporting more than 150 North American-based customers. These are typically large nationals/MNCs, or North America-based regional companies with an annual voice and data spend ranging from \$2 million to \$100 million, and also 500 to an unlimited number of mobile devices.

Comview also offers UC usage management based on endpoints, and an emerging mobile IoT device management capability. The company currently does not directly manage cloud and SaaS

application expense management, but customers can track licenses and subscriptions. In the mobility space, Comview's procurement options are supported by e-bonding with Verizon and AT&T. It also offers enhanced security through integrations with leading MDM providers, including two-way AirWatch integration. Comview is capable of integrating with most HR and general ledger systems.

Comview has introduced enhanced business analytics, including preconfigured interactive dashboards, using Tableau Software. Comview will include a single Tableau Software license, or customers can use their existing licenses and expertise to visualize data in meaningful new ways.

Comview supports over 40 global carriers, serving 16 countries with mobile services. It uses partners for resources and services outside of North America. It also partners with Unify and Black Box for expanded distribution. Comview has a holistic and high-touch customer approach to account management, including comprehensive upfront audits (as part of the offering), and maintaining all inventory with ongoing audits to identify/implement savings and optimizations throughout the client engagement. Comview delivers guaranteed savings upfront to customers via a controlled but solid ROI. This is reflected in its "customer for life" philosophy and its long-standing customer base.

Dimension Data

Dimension Data has its own TEM platform, NexTEM (evolved from its past investment in Xigo). Dimension Data's communications life cycle management function has around 160 employees directly attributed, yet also collaborates with Dimension Data's wider resources (some 31,000 employees) for service delivery, project management, support, additional managed services, help desk functions in regional sales and support. Dimension Data is a global provider of information and communications technology and services, with a strong ability to manage and optimize a wide spectrum of enterprise communications infrastructure.

The core TEM offering is based on its NexTEM platform, providing fully fixed and mobile telecom expense management via a single cloud-based portal. It has added a UCC cost and efficiency capability, and extended to incorporate SaaS licensing, mobility management services and other device/IoT management elements beyond traditional TEM.

The NexTEM platform is the foundation for Dimension Data's entire communications life cycle management practice. Features include support for SaaS licenses and IoT devices. Its TEM offering manages annual spends from \$10 million up to hundreds of millions for large regional, national or multinational enterprises. NexTEM provides support for all international carriers and currencies, offering multilanguage support through the NexTEM user interface and via its 17 global service centers.

Dimension Data provides a full IT life cycle management solution by focusing on cost optimization, service usage and business utilization applied inside and outside the network edge, and across the entire IT service portfolio. This approach offers a comprehensive view of its clients' network assets and carrier services, allowing them to better understand and control their network costs and utilization across fixed, mobile, UC, conferencing, collaboration and other subscription services.

Dimension Data has operational presence in all major geographic regions, giving it strong resources to provide managed TEM (fixed, mobile and UC) for global expenses of large multinational companies in mature and emerging economies. In addition, broader managed services, outsourcing/integration pedigree of Dimension Data strengthens the TEM offering throughout the engagement process.

MDSL

MDSL is based in London, U.K., with offices in Hong Kong, Sweden, France, U.S. and Japan (via long-term partner Tokyo Tanshi). Its international office network provides local support to customers worldwide. MDSL manages more than \$2 billion in fixed and mobile telecom spend annually. MDSL targets large global enterprises and multinationals with annual telecom spend of at least \$5 million with international requirements.

MDSL's TEM portfolio covers fixed line, wireless, mobile including MMS, voice over Internet Protocol (VoIP) and conferencing from a single portal. It provides a framework for managing the communications life cycle, including inventory management, contract management, invoice processing, auditing, usage analysis, chargebacks, order and provisioning workflow, dispute management, reporting, and business intelligence. It has recently added expanding M2M support and is growing its mobile IoT offering in partnership with Arrow Electronics.

MDSL also supports enterprises that require M2M expense management, having invested in enhanced R&D capabilities for IT areas including hosted applications and cloud licensing management. MDSL also offers enhanced tracking and financial management of IT assets and has e-bonding with Verizon and AT&T. It provides extended automation and improved visualization (including calendar views and near-real-time analysis) for various TEM functions, along with enhanced inventory data feeds from vendors, and rate benchmarking of carriers across North America and EMEA.

MDSL offers global SLAs for its service and platform capabilities, with multicurrency and multilingual capability, and a 24/365 "follow the sun" approach for help desk support. It maintains a focus on compliance with the different data protection and privacy regulations for operations worldwide. Delivered either as SaaS or a fully managed/BPO, MDSL's business is currently 80% direct, but half of new sales — and growing — are via its network of international value-added resellers (VARs) and SIs.

MDSL's open architecture allows customers to integrate their TEM solution with products from other MDM, mobile application management and MMS vendors to provide a comprehensive communications life cycle management proposition.

Mobile Solutions

Mobile Solutions is a North American SaaS company, based in Denver, Colorado, U.S. It provides full life cycle mobility management services. In 2016, it received investment from Texas-based private equity partner Clovis Point Capital to execute on its long-term growth plans. Mobile Solutions has over 50 employees and around 500 enterprise customers. It serves the MMS space exclusively by offering a full life cycle service, including procurement, staging and kitting, near-real-

time expense management, as well as business analytics and reporting, EMM, repair, and disposition.

It focuses on all verticals by targeting large North American-based customers, typically with around 500 devices to more than 10,000. The company has carved out a niche in the construction space, with more than 150 clients. It currently supports 21 North American carriers and two U.K. carriers. The company has more than 200,000 mobile devices under management, of which currently 5% to 7% are M2M.

Mobile Solutions believes one of its key differentiators is offering potential clients the opportunity to trial its service for 45 days at no cost. During the trial, it presents the prospect with a self-monitoring, analysis and reporting technology assessment detailing optimization and efficiency opportunities. The platform software provides near-real-time account management and actionable business intelligence, and its commercial terms — which emphasize guaranteed savings. Mobile Solutions' 24/7 always-on, U.S.-based service desk, manages more than 10,000 devices per agent, supports administrations and end users via the platform and dedicated service desk numbers. Each client has a dedicated account manager who proactively manages their account, completes real-time optimizations, and provides monthly account reviews showing mobile environment statistics, analysis, savings and customer service experience. Customers can cancel the contract if Mobile Solutions doesn't meet its stated monthly savings or if the company misses on its service-level guarantees. Customers can choose month-to-month, one-, two-, or three-year contracts, with discounts for term contracts. Customer satisfaction is highlighted by Mobile Solutions Services' 97% client retention rate.

While this company has been primarily North America-focused, it announced the addition of support in the U.K. with select carriers, and plans to expand into other English-speaking countries as part of its 2017 roadmap.

Network Control

Network Control is based in Waverly, Iowa, U.S. with offices located in four other U.S. cities. Network Control provides fully managed TEM services for over 75 enterprise clients, typically large North American-based companies with spending ranging from \$200,000 to \$4 million per month and a minimum 1,000 IT assets (mobile, personal hot spot and tablet). Network Control manages global annual spend for enterprises of more than \$700 million across fixed voice, data and mobile, and also across most vertical industries.

The company provides fully managed TEM services for fixed, mobile and other IT asset types, scoped according to the size and scale of the requirement. It also has a self-managed portal offering.

Network Control's managed TEM software and functions incorporate contract management, procurement, order provisioning, invoice validation, audit processing, RFP, strategic planning, allocation and chargeback. It also routinely provides regular monthly ongoing inventory analytics and reporting of savings that are measured against baselines for fixed and mobile TEM (including tablets and personal hot spots). Its services also extend into other billable items such as UC and

cloud licenses. Extending in the mobile side, Network Control also offers wireless help desk support and optimization. It can also provide kitting for wireless devices, proactively managing all points of the communications life cycle for the TEM engagement and it is also carrier-agnostic.

Network Control has a dedicated support team. It also offers seamless integration into business processes general ledger, HR and accounts payable.

Due to the company's close engagement with customers, achieved through a high employee-to-customer ratio, the average tenure currently stands at around eight and a half years, with one partnering for 18 years.

Saaswedo

France- and U.S.-based Saaswedo is a TEM platform provider and an aggregator of pricing of just over 75 operators currently controlling enterprise telecom policy, and managing telecom assets and operational costs within its TEM platform. The company has acquired two competitors over the years and has a significant ownership interest in Tec-Ker, which provides managed services and other IT/BPO-type services to larger French enterprises and MNCs.

Saaswedo has about 50 employees and some 10,000 customers (from small office/home office to large European MNCs ranging from \$50,000 to \$38 million in annual spend). It manages 3.5 million lines, of which approximately 60% are wireless and 40% are fixed. It also has a strategic partnership with Microsoft which extends its offerings worldwide.

Saaswedo offers a SaaS-based approach to TEM, targeting mainly U.S. and European-based enterprises. It offers both fixed and mobile telecom life cycle services on a single platform — a cloud-based service called "mytem360." Additional expense management items include Microsoft Azure and Office 365, cloud and storage services. Saaswedo also supplies Datalert, a real-time mobile data usage monitoring solution to avoid unexpected overage costs from carriers and to manage pooling plans. It integrates with the main MDM providers (Microsoft Intune, IBM MasS360, AirWatch, MobileIron and Citrix XenMobile) and is directly recommended by the MDM providers. Datalert allows analytics per app to split corporate data usage from personal data usage. It is not a proxy-based solution and works with 1,300 carriers worldwide.

Saaswedo uses a channel/partnership strategy for both technology and go to market. Saaswedo develops a partnership program that empowers channels with real time and traditional TEM offers.

Tangoe

Tangoe is the largest TEM provider and an amalgamation of nine acquisitions, one of the latest being Vodafone's TEM business in 2016. On 28 April 2017, Marlin Equity Partners entered into an agreement to acquire all outstanding shares of Tangoe. Once completed, Tangoe will be combined with Asentinel to operate under the Tangoe brand with Jim Foy serving as CEO and Asentinel's CEO Tim Whitehorn as Chief Product Officer. Until completion of the acquisition, both brands and platforms will remain separate. Tangoe has 15 offices due to restructuring (reduced from its previous 21). Tangoe offers fixed, mobile and other IT expense management solutions. The company's cloud offering is emerging with SaaS/laaS/PaaS later in 2017, with other IT expense management tools.

Tangoe also offers an enterprise MMS solution suite with three distinct packages to address the challenges of device deployment and user support; mobility governance and security; and expense management and optimization. Tangoe has simplified its pricing structure, offering a SaaS-based host and load expense management solution for fixed and mobile, a fully managed fixed and mobile productivity package including MMS, and an optional EMM mobile device security package. Tangoe's client base typically includes large North American regional and global companies, with annual telecom spend ranging from \$5 million to over \$750 million per year.

Tangoe has customers on legacy systems, while finalizing its new IT Expense & Asset Management solution, scheduled for general availability when early adopter customers have migrated their business operations to it. Gartner expects this to be in 4Q17. Existing clients can migrate to the new solution when it is available. Until then, new customers will be implemented on the enhanced versions of the Command Premium Mobile and Rivermine platforms, and can migrate when they see fit. The new solution is the company's IT expense and asset management technology platform, designed to help companies transform the management of IT inventory, services, expenses and usage to create business value, increase efficiency and deliver positive impact to the bottom line and actionable insights.

Tangoe has offices around the globe providing local expertise and support, in EMEA, Latin America, China, India and Australia. It supports a total telecom spend under management of \$35 billion and also has more than 6 million devices under management. Tangoe's varied legacy solutions are implemented in 11 data centers worldwide, providing service coverage in various territories and meeting strict data privacy regulatory requirements — although the capabilities of one legacy platform versus another might be inconsistent depending on the region and the base platform deployed by country.

Tangoe processes more than 1.2 million invoices per month and 72,000 mobile fulfillment orders in more than 45 currencies. It partners with ServiceNow, MobileIron and AirWatch (among others), to act as technology partners, service partners and provides additional channels to market. While customers wait for the new solution, Tangoe has been busy restructuring its services organization internally, to provide a better consistency on customer touchpoints by unifying its program, project and account management approach to customers to become easier to do business in a consistent manner. The new IT expense management platform (built from the ground up) is configurable within the UI delivering flexible deployment and scale options. It will provide services tailored to international business units and regions, within a consistent framework and single platform.

Telesoft

Telesoft is based in Phoenix, U.S., offering fixed and mobile TEM services, managed mobility services, and call accounting functionality in either an on-premises license, self-managed SaaS or hosted model, or as a fully managed TEM/BPO engagement. Telesoft's integrated platform provides a single interface that supports full life cycle invoice management, including invoice receipt, bill validation, contract management, approval flows, invoice payment, and it also integrates seamlessly with AP and ERP systems to provide a single point of entry for all invoices to ensure timely payment. Telesoft's managed mobility services include device procurement, usage reporting, plan optimization, help desk services, forward/reverse logistics and MDM administration services. As

part of its integrated platform, Telesoft is unique in offering robust call accounting functionality for traditional telecom, UC/VoIP, cloud, and IT infrastructure providing costing and chargeback, as well as network/traffic management. The asset management module rounds out the offering and provides configurable procurement workflows, physical asset tracking, trouble ticketing, and cable/wire management. Although its predominant engagement approach is a managed service agreement sold directly to the enterprise market, Telesoft is expanding its indirect reach through channel partners, while continuing to build its direct sales staff. Telesoft has around 120 employees in three U.S. locations.

Telesoft focuses selling efforts on organizations that are headquartered in the U.S. It can support international operations with features including currency and language conversion. Specifically, it serves more than 200 organizations with annual telecom expenditures of at least \$5 million and more than 1,000 mobile devices, including large MNCs, local and federal governments, and large educational establishments. Yearly customer telecom spending under management is \$2.1 billion, managing more than 400,000 devices.

TNX

TNX is a regional Latin American TEM company, headquartered in Santiago de Chile, with a total of seven offices in Argentina, Brazil, Colombia, Chile and Mexico. It has around 100 employees and typically serves large pan-regional Latin American-based multinationals, as well as global enterprises that have a strong presence in Latin America, serving mostly the financial services, retail, consumer goods, healthcare and manufacturing verticals. It is expanding into Europe, based on a global contract with a major Spanish multinational and also into Australia. TNX can directly support enterprise customers in over 25 countries. TNX's serves companies with an annual spend of \$1 million upward, typically large enterprises with up to \$100 million or more, or \$5 million to beyond \$100 million in IT spend annually, and/or 1,000 or more corporate liable devices.

TNX has a consultative approach to telecommunications management with a focus on improving spend productivity, re-engineering internal processes (where required) to implement TEM solutions including IT services. Its TEM platform can be deployed as a fully managed solution across fixed and mobile environments with a modular design depending on the enterprise needs by providing separate modules of inventory management, sourcing management, procurement and order management, invoice management, expense management, usage management, reporting and business intelligence as well as bill payment. Typical customers implement the full set of processes with recurring monthly fees for BPO, based on percentage of spend. TNX can also provide a gain share agreement on category spend. The company also offers managed mobility services, managing well over 50,000 devices regionwide, and is currently securing funding for further expansion.

TNX can also provide seamless integration for other TEM partners to fulfill Latin American and Iberian elements of global contracts through their partner portal to which TNX audits inventory, usage and billing information into partner portals, and provides the last mile service, which includes collection or carrier credit notes, contract negotiation support and MMS services.

VoicePlus

Based in Sydney, Australia, VoicePlus is active in the MMS space, providing fleet management and MDM, in addition to TEM. The company provides services to more than 600 medium and large Australian enterprises and MNCs in Asia/Pacific, offering fixed and mobile, endpoint computing solutions, with annual telecom spend ranging from AU\$0.5 million to AU\$12 million, and mobile devices from 400 to 10,000. VoicePlus manages more than 61,000 devices and AU\$36.6 million in annual enterprise telecom spend. It has 38 employees, from technical staff to dedicated account teams.

VoicePlus' Atrium Managed Mobility solution is a hybrid TEM, IT asset management, software asset management, IT financial management and telecommunications asset management solution. Integrating into both HR and payroll systems and providing asset cataloging, procurement, management, reporting (including chargeback) and maintenance/repair, the solution tracks any asset that wholly belongs to a single entity (usually a person) and provides a single total cost for that entity.

The company uses an e-managed service desk for operations, and an e-supply solution that generates automated customized ordering and delivering systems. VoicePlus offers procurement, reporting through to dispute resolution, and offers usage and service optimization, billing error resolution and action plans against unauthorized usage and excess usage of mobile expenses via its Atrium Smart Portal, serving the complete mobile telecom life cycle. It is integrated with ServiceNow, is AirWatch-certified, and is an accredited Telstra enterprise and business partner.

WidePoint

Based in McLean, Virginia, U.S., WidePoint is one of the largest providers of TEM services to federal, state and local governmental enterprises as well as large and/or multinational enterprises. It operates in North America and Europe, and can deliver solutions globally, and it has around 300 employees.

Traditional TEM services for fixed and mobile are delivered with an emphasis on inventory management, invoice auditing and cost reduction. Additional features include cost allocation and budget management, mobility management, including customized web portals for wireline and wireless business intelligence and analytics. The full telecom life cycle is supported, including telecom policy and contract enforcement, procurement, and end-to-end logistics (such as next-day replacement, inventory management and optimization, repurposing, custom kitting, secure disposal and program rollout). It can also provide a single TEM platform, which will manage both mobile and wireline expenses.

WidePoint focuses on tailored solutions for larger customers, going beyond TEM as a managed service to include mobility management, identity authentication and access management. As a leading provider of public-key-infrastructure-enabled identity management systems for the U.S. federal government, WidePoint also brings its experience and expertise to the commercial markets.

Market Recommendations

I&O leaders should select TEM vendors that can support the scale and scope of the enterprise needs by checking capabilities of the vendor in terms of true scope for international requirements. Vendors might have to rely on partnering in some regions, especially where differentiated invoice formats are not in a standardized form, which might take time and/or additional resources. I&O leaders, and their sourcing management partners should require TEM vendors to acknowledge if they need to partner — and identify those partners — for successful fulfillment.

When deciding whether to source from a TEM vendor, I&O leaders should consider the level of internal governance required, whether they lack staff, or whether they are sufficiently centralized to manage the telecom assets effectively. TEM vendors augment such resources, and can provide the professionals with telecom industry experience to effectively navigate carriers for their rates, devices, service plans and enterprise management platforms. TEM vendors regularly analyze their clients' usage and consumption, and can make ongoing recommendations and improvements to optimize spend. These ongoing optimizations can be achieved on top of the initial value proposition for cost optimization.

As well as the initial savings opportunities that can be generated, ongoing optimization of communications assets and services can also be achieved, in addition to the scaling into new technology expense management areas as a valuable addition. The ongoing value of TEM has been proven in terms of the systems and platform ability to continuously audit, optimize and provide relevant reporting, analytics and business intelligence for scenario planning for strategic growth initiatives.

When selecting TEM vendors, I&O, sourcing and vendor management leaders should have a good knowledge of their telecom estate and an idea of additional communications areas or plans for evolution. For example, moves to operating expenditure (opex) environments with cloud-based applications and services, or expanding mobile devices and transitioning to the Internet of Things. TEM vendors are scaling into this area and can also help curb fragmented governance and management of these processes into a more centralized and standardized environment promoting optimization.

Acronym Key and Glossary Terms

AP	accounts payable
API	application programming interface
APAC	Asia/Pacific
AU\$	Australian dollar
BPO	business process outsourcing
BYOD	bring your own device
CEO	chief executive officer
CLM	Communications Lifecycle Management
EDI	electronic data interchange
EMEA	Europe, the Middle East and Africa
EMM	enterprise mobility management
ERP	enterprise resource planning
GL	general ledger
HR	human resources
HRIS	human resources information system
I&O	infrastructure and operations
IaaS	infrastructure as a service
IoT	Internet of Things
IP	Internet Protocol
ITSM	IT service management
ITSSM	IT service support management
M2M	machine-to-machine
MDM	mobile device management

MMS	managed mobility service
MNC	multinational corporation
Nasdaq	National Association of Securities Dealers Automated Quotations
NYSE	New York Stock Exchange
opex	operating expenditure
PaaS	platform as a service
PBX	private branch exchange
R&D	research and development
RBAC	role-based access control
REST	representational state transfer
RFP	request for proposal
ROI	return on investment
SaaS	software as a service
SI	system integrator
SLA	service-level agreement
SOAP	Simple Object Access Protocol
SME	subject matter expert
TEM	telecom expense management
UC	unified communications
UCaaS	unified communications as a service
UCC	unified communications and collaboration
UI	user interface
VAR	value-added reseller
VoIP	voice over Internet Protocol

YE	year-end
----	----------

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Competitive Landscape: Non-Pure-Play Telecom Expense Management Providers, 2016"

"Competitive Landscape: Independent Telecom Expense Management Providers, 2016"

"Service-Level Agreements in Telecom Expense Management Contracts Are Key to Vendor Performance"

"Toolkit: Telecom Expense Management RFP Template"

"Magic Quadrant for Managed Mobility Services, Worldwide"

Evidence

Gartner observed an increase of 45.1% in end-user inquiries in 2016 versus 2015, with a growing focus on vendor sourcing. This, along with provider discussions and analysis of key choices, are the basis for this research.

Note 1 Definitions

TEM is a specific, but challenging function, within IT and cost management. It is widening in scope as most enterprises' range of fixed services and mobile devices grows and diverges. Enterprises seeking to better manage this communications complexity and its associated costs often look to third-party TEM providers as the most cost-effective way to secure the program management capabilities they need, as there is no internal "build" option available. Enterprises wanting to improve their costs management as well as drive efficiencies in telecommunications procurement and support, look to TEM providers with the following capability areas:

- Sourcing management refers to TEM vendors that negotiate prices, terms and conditions for telecom contracts on behalf of customers.
- Ordering and provisioning management supports the commissioning and deployment of telecom/network services and mobile assets, based on predefined rates and support for user profiles, drawing on service catalogs, structured workflows and authorizations. Process services for ordering and provisioning include help desk services for order placement and logistics support relating to deployments, replacements and break/fix depot repairs. Also included are help desk services for cases where self-service portals cannot address end-user needs.
- Inventory management applies to processes and services that provide one or all of the following for fixed mobile services and mobile devices — asset discovery; asset management; asset database/repository; asset portfolio management; and tracking of purchases, leases, contracts

and disposal, relating to telecom assets and expenses. Links to general ledger accounting system modules, such as the capital asset ledger, are common.

- Invoice and contract management combines the invoice audit function with the accounts payable invoice processing function.
- Usage management helps identify cost objectives and usage permissions by using call accounting and detailed invoice data. Usage is tracked to allocate costs by individual, department, cost center or other user-defined spending category across corporate locations.
- Dispute management ensures the recovery of credits and management of short-pay and no-pay decisions.
- Reporting and business intelligence encompasses a vendor's ability to offer customers practical information and analytics, to improve financial forecasts and usage planning.

The use cases for TEM that are typically discussed in Gartner client inquiries are about the following:

- **Resource, cost visibility and control.** Reduction of costs and a high ROI are key in any IT agenda. With proven returns and clear routes to savings, TEM is a popular option for enterprises wanting to manage telecom expenses more closely. Companies aligned with this use case perceive fixed and mobile telecom as significant issues in cost and unmanaged entitlement. Solutions combine reporting, notification with inventory and dispute management.
- **Fixed TEM outsourcing.** Traditional fixed-line phone systems remain a part of most enterprises — despite their decreasing use among highly mobile or traveling workforces. Staff resources to manage associated spending effectively are often missing, too few or lack expertise. Organizations facing this resource challenge will engage TEM providers, or do so to offload noncore activities and provide better customer service.
- **Mobile TEM outsourcing.** Mobility outsourcing is appealing because it offers the promise of extensively structured and managed processes and methodologies, providing operational and financial controls based on corporate need. Companies seeking assistance with bring your own device (BYOD) and roaming policy development and enforcement, and/or with ordering and provisioning of replacement and upgraded mobile devices, will align with this use case.
- **Fixed sourcing.** Companies categorized by this use case are both those with limited experience negotiating telecom contracts with carriers, and those larger, more complex organizations with multiple carrier relationships seeking to consolidate or manage diverse carrier agreements. These organizations also demonstrate a greater willingness to trust TEM vendors to source, order and provision wireline assets such as circuits.
- **Mobile sourcing.** Enterprise organizations with limited experience negotiating mobile telecom contracts with carriers, and larger, more complex organizations with multiple mobile carrier relationships seeking to consolidate or manage diverse carrier agreements, find sourcing from TEM vendors particularly valuable. These companies expect the convenience of a readily accessible online portal and help desk services to acquire mobile assets and services.

Gartner does not consider TEM solutions around element management for telecom infrastructure such as PBX and key telephone systems, Internet Protocol (IP) telephone equipment and other voice communications infrastructure. Element management is covered in a typical network IT engagement. Over-the-air MDM is increasingly bundled with TEM offerings. Managed mobility services are an adjacent market, of which many TEM players are morphing into.

GARTNER HEADQUARTERS**Corporate Headquarters**

56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters

AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations,
visit <http://www.gartner.com/technology/about.jsp>

© 2017 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. or its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. If you are authorized to access this publication, your use of it is subject to the [Usage Guidelines for Gartner Services](#) posted on gartner.com. The information contained in this publication has been obtained from sources believed to be reliable. Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information and shall have no liability for errors, omissions or inadequacies in such information. This publication consists of the opinions of Gartner's research organization and should not be construed as statements of fact. The opinions expressed herein are subject to change without notice. Although Gartner research may include a discussion of related legal issues, Gartner does not provide legal advice or services and its research should not be construed or used as such. Gartner is a public company, and its shareholders may include firms and funds that have financial interests in entities covered in Gartner research. Gartner's Board of Directors may include senior managers of these firms or funds. Gartner research is produced independently by its research organization without input or influence from these firms, funds or their managers. For further information on the independence and integrity of Gartner research, see ["Guiding Principles on Independence and Objectivity."](#)